

## BIBLIOGRAPHICAL NOTICES.

ART. XII.—*An Essay on the Use of Narcotics and other Remedial Means, calculated to produce Sleep in the Treatment of Insanity.* By JOSEPH WILLIAMS, M. D. London, 1845: pp. 120.

For the publication of this small volume, certainly one of the best that has recently appeared on the subject of insanity, we are indebted to the good sense and liberality of the Lord Chancellor of Ireland, who some time since placed at the disposal of the President and Fellows of King and Queen's College of Physicians, a premium, to be conferred upon the writer of the best essay on some subject connected with insanity. The subject selected and publicly announced was "the use of narcotics and other remedial agents calculated to produce sleep in the treatment of insanity," and to the author of the essay under notice the premium was subsequently awarded.

The author very justly remarks that "the importance of this subject cannot be over-estimated—to induce sleep in every stage of insanity is most desirable—to procure it in incipient cases is often to effect a cure—and, in many persons, the symptoms primarily nervous, become subsequently inflammatory if vigilancia be not arrested; many cases of insanity being entirely prevented by procuring sound and refreshing sleep."

Although somewhat cursorily, the author has noticed the following topics, certainly among the most interesting and important of all that are in any way connected with the treatment of insanity: viz., "the importance of early treatment in cases of insanity—the prevention of insanity, by procuring sleep—the error of always attributing insanity to organic disease—and those numerous agents which indirectly produce sleep, although not narcotics. Bleeding and the antiphlogistic treatment have been more fully considered, and an attempt has been made to show the importance of distinguishing inflammation from maniacal irritation—the great advantage of the calming and soothing system being duly estimated. Considerable attention has also been given to narcotics—the use of various kinds of baths—exercise and amusements—and traveling—together with some observations respecting metaphysical and moral treatment."

Very few of the remedies that induce sleep, are narcotics, and valuable as these last undoubtedly are, they are, perhaps, on the whole, less so than many of an entirely different character. No class of means requires greater discrimination in the selection of cases for their employment, and there are none in which a sounder judgment is required in deciding upon the extent to which they may safely be employed. Venesection induces sleep in one instance, and stimulation in another—the shower-bath in one case, and the hot bath in another. Labor brings the soundest and best sleep to many, while a purge or a full dose of landauum alone will procure it for others.

Without attempting to enter into a lengthened discussion, we shall, as far as our limited space will admit, follow our author through some of the most important points under notice; and with a few remarks suggested by the text, give our readers a general idea of his views and principles of treatment.

A class of cases referred to in the preliminary observations will be familiar to many practitioners, and are often found afterwards under care in hospitals for the insane. Mistakes are so frequently made in the diagnosis of these cases, and the consequences of such errors are so serious, that we copy the author's very sensible observations on the subject.

" Some of the mildest cases which occur when there is preternatural excitement with vigilancia, are those of persons having over-fatigued the mental powers by continued application, more especially if confined to one subject, and the ill effects seem to be produced more frequently in those whose hopes and fears are

in addition adding to the excitement, as is often noticed in junior barristers and students at our universities.

"Now in such instances, if a young man apply early, the case is usually cured very rapidly, sometimes even within twenty-four hours; if passed over for a few days, recovery is retarded, and if totally neglected, phrenitis or mania by no means unfrequently ensues. In such cases there is great *action*, which is but too frequently mistaken for *power*: the pulse is quick, perhaps 100, 120, or even more; tongue white; face flushed; throbbing and heat of the temples; rolling, sparkling, and injected eye; rapidity of speech; everything showing great excitement. Now this description is not sufficient to guide us in the treatment, for all these symptoms may depend on excessive nervous excitement; but more attention must be given to the pulse: if the pulse, in addition to being quick, is also full, hard and bounding, and if the skin is dry and hot, then the abstraction of blood, both general and local, will usually be necessary, and often within an hour or two after depletion, the skin becomes moist, and the patient falls asleep. But what I am the more anxious to particularize is the opposite condition, when bleeding is unnecessary and unsafe. Supposing the pulse to be quick, soft and fluttering, weak or intermittent, the skin moist and clammy, and yet the excitement just as decided as in the other case, to bleed here is most improper, and many cases of insanity have arisen from such practice. The judicious administration of a narcotic will act as a charm." The cases requiring depletion are really very few, and although the pulse is to be somewhat of a guide, the amount of depletion that can be borne will not be at all in proportion to its apparent force. If the excitement is made the criterion, and depletion is persevered in, the excitement increases, and if the patient does not sink during the first stage, a tedious mental convalescence ensues, or often the sufferer sinks into *dementia*.

The author's classification of insanity is, in our estimation, a very imperfect one,—"monomania, mania, and idiotism," is neither comprehensive nor correct—for idiotism can hardly be termed insanity; it should always be distinguished from *dementia*, which is a form of mental disease either primary, or, still more frequently, the result of acute mania. Congenital dementia would be equivalent to idiotism, but it is important that dementia and idiotism should not be confounded.

Several pages are devoted to the opinions entertained by medical men of distinction relative to the seat and primary cause of insanity, and to the pathological appearances which are rarely absent in the cerebral structure when the disease has been of any considerable standing.

Every one who has had charge of many patients, will agree with our author that "it is of the greatest importance to determine whether arterial action is the result of inflammation, or whether it arises from maniacal irritation." Diagnosis here is of the greatest importance, and the error is nearly always in adopting a treatment perfectly proper for inflammation, but most unfortunate for cases of a different character. The experience of nearly all our institutions is, that in the majority of the cases brought to them, the primary treatment has been too depletory, and the frequency with which acute plenitis is mistaken for insanity, is a proof that too much caution cannot be observed in deciding upon cases of this description.

"While *bleeding*," observes our author, "is generally injurious in the treatment of mania, it may occasionally, although rarely, be indicated. All modern authorities condemn its employment, except under peculiar circumstances: the longer disease has existed, the more dangerous is general depletion; and it is usually only in incipient cases that any good can be expected from its adoption." Cupping and leeching are referred to as much less objectionable in many cases where general depletion is quite inadmissible. The author's views relative to insanity frequently arising from irritability dependent upon prostrated power, and his recommendation of "good nutritious food, and sometimes even with brandy and wine, at the same time soothing the system by procuring good and refreshing sleep at night by morphia," will meet with approval from nearly every practical man. "In many cases, where there is the most furious delirium with great muscular power, yet the pulse is very quick, weak, and fluttering, and even the slightest depletion at once knocks down the powers; but even if the patient should again rally, there is great danger of his becoming idiotic."

Our own experience accords with the remark that, "as a general rule, the quicker the pulse the greater the danger," although the average in our maniacal cases would be lower than that given by our author.

Dr. Gooch is quoted as high authority, for the doctrine that puerperal insanity rarely bears depletion well, and that sleep is to be procured by anodyne, narcotic and sometimes stimulant remedies.

"With respect to *diet* the general rule is, nutritious but not stimulating. In incipient cases it must be a little diminished, but after a short time good wholesome food must be allowed. Too spare a diet is often most injurious, and when much curtailed, is most disastrous. A nutritious meal often wonderfully calms excitement, while hunger or craving materially aggravates maniacal irritation."

We agree with Dr. Williams that, as a general rule, medicine should never be mixed with food; when it is detected, it destroys the patient's confidence; he becomes suspicious, and frequently considers delusions respecting attempts to poison as fully confirmed.

*Purgings* is undoubtedly often necessary in the treatment of insanity; but free purging, frequently repeated, has little confidence from the majority of those who have the care of the insane in this country, and our author's estimate of its powers we think rather higher than will be confirmed by general experience. The indications for the use of purgatives are those that would be operative in other diseases. Laxatives, however, are not objectionable.

*Emetics* have nearly lost the character they once enjoyed in the treatment of insanity. Dr. Williams, however, still entertains a high opinion of their efficacy in many cases where general depletion cannot be resorted to, and thinks that "the continued action of tartar emetic cannot be too much lauded in some incipient cases of mania." "Emetics," he observes, "must never be administered to paralytics, nor indeed when there is the least tendency to apoplexy; they are more useful in incipient insanity, and rarely indicated in chronic cases, and should never be given to those in advanced life." We have not very often administered emetics to insane patients, and when we have, have never observed any advantage from their use.

*Opium* is unquestionably one of the most valuable remedies employed in insanity, but, like other potent means, it is to be used with discrimination; and while in some its effects are truly wonderful, in another large class it is useless, and in some unquestionably injurious. To the consideration of this drug, of its different preparations and modes of administration, Dr. Williams devotes near twenty pages of his essay, and his views, in the main, have been confirmed by our experience, and we shall extract from his remarks enough to give the reader a tolerable idea of his mode of using it. We believe we are safe in asserting that the use of opiates has been more general in institutions for the insane in the United States than elsewhere; that they have been much more largely given; and that, as here employed, the most remarkably good effects have been observed. It is not to be denied, however, that even with us there is no little difference of opinion as to the precise value of this class of remedies, and that what is considered a very full dose in one hospital, is regarded as very moderate in another. Generally, however, the doses will be found larger than have heretofore, at least, been common in Europe.

"To prescribe opium," observes Dr. W., "as a narcotic in every case of mania, is bad practice; and it is this which has brought it into such disrepute in the treatment of the insane. Opium is contra-indicated when there is great heat of skin, with extreme restlessness, and determination of blood to the head; and all authorities seem agreed that it should never be administered when the system is plethoric, unless depletion or purgation, or both have preceded it; otherwise excitement will become doubly aggravated."

"When the nervous system is highly excited, and this is caused by increased arterial action, opium is contra-indicated; and if administered, the symptoms will certainly become aggravated."

"Opium will generally be found more useful in incipient than in chronic insanity; it is contra-indicated when there is congestion or inflammation of the brain, and especially if the motor nerves are affected. In paralytics, or when organic disease of the brain exists, it should never be given."

Regarding the dose, our author remarks, that "it is impossible to limit the extent to which opium may be required, but in stating that a full dose is necessary, from two to five grains may be considered a large dose for most constitutions; where habit has impaired its effect, one and even two drachms of solid opium have been taken in a very limited period." He also approves of Dr. Burrows' plan of never venturing beyond five grains in a dose; and, generally beginning with three grains, repeats one grain every two or three hours, never allowing it to exceed twelve grains, when, if sleep has not resulted, he desists.

Dr. Williams considers opium in large doses particularly indicated in puerperal and in suicidal mania, and lays proper stress upon the important fact that, "when opiates are indicated in insanity, the dose must be large." Small doses and a want of perseverance have done much to bring this remedy into disrepute.

The *liquor opii sedativus* is recommended by our author as "much milder in its effect, and less stimulant than laudanum," and, from experiments, he "found it more uniform and certain in its effects, while it did not cause the disagreeable waking symptoms so often noticed when an opiate has been given. Many persons who slept well with it, passed a restless and uncomfortable night when laudanum was substituted for it."

Opiates administered in the form of enema are highly spoken of, and surprise is expressed at the opposition to this mode of using opium, by the French, who are rather fond of enemata. Rubbing the abdomen with laudanum and oil is also mentioned with commendation when other modes do not seem practicable.

The different preparations of *morpbia* have been found preferable to all other modes of administering opiates, particularly if to be long continued, and, Dr. W. believes, without the disagreeable or troublesome symptoms which have been proved to follow opium and laudanum. The hydrochlorate, he thinks, acts less as a primary excitant than even the acetate, yet more certainly as a subsequent hypnotic. "The usual dose of either the acetate or hydrochlorate is from one-third to one-half a grain; this may be given every six or eight hours if necessary, but when intended as a hypnotic, one-half a grain, or even one grain may be ordered at bed-time, when sleep usually follows, and even if this be not the case, the nervous system becomes calmed, and the patient lies in a state of repose."

Numerous authorities are quoted for the value and use of *digitalis* in the treatment of insanity, and Dr. Williams has frequently used it, and seen it used by others, successfully, to lower the pulse when there was increased arterial action, care having been taken that the antiphlogistic treatment had preceded it,—and sleep has frequently been found to follow its employment.

"The tincture seems the most eligible form for administering digitalis, and about ten minimis every six hours may be considered an average dose to commence with in maniacal cases; if the pulse does not diminish in frequency, five or six days after its employment, it should be discontinued."

"*Hyoscyamus*," our author observes, "is especially useful in nervous habits, and is particularly indicated in monomania, and even the temporary quiet derived from it in mania, is often of the greatest benefit. When there is excessive nervous irritability, it has often a remarkably calming and soothing effect; it may also be given when there is vascular excitement, when opium is so strongly contra-indicated; it does not excite the brain in these cases, and is often found to reduce arterial action."

"When a sedative has to be continued from day to day, or several times during the day, hyoscyamus will be often the very best we can select; as, in addition to its tranquilizing effects, it will not check, if it does not actually cause dia-phoresis, while it promotes the flow of urine, and also relaxes the bowels."

Dr. Williams believes that hyoscyamus accumulates in the system, and records the case of a gentleman who by order of his physician took five grains of the extract, three times a day, for six weeks or longer. "Vertigo, syncope, and extreme depression suddenly occurred, the pulsations of the heart very feeble. Brandy and ammonia were largely administered before the slightest reaction took place." Every one expected the immediate death of the patient. There were no indications of organic disease, and the symptoms were afterwards referred to the cumulative effects of the hyoscyamus. The patient ultimately recovered.

From five to ten, fifteen, or even thirty grains of the extract, Dr. W. says, may

be given at once, but when necessary to be repeated, he considers from five to ten grains an average dose. He also cautions against giving henbane as an enema, "as several fatal cases have resulted from this indiscretion, and therefore it should never be given in this form."

*Conium* is referred to, but not as a very powerful agent in producing sleep. It is really in our estimation a valuable remedy, particularly in the treatment of certain cases of chronic insanity, but we have never known it used simply to produce sleep, nor have we noticed that effect from its employment.

Of *Camphor*, Dr. W. says from fifteen to twenty grains must be given to produce its desired effect; if half a drachm be administered it acts very powerfully as a narcotic, and is often found very useful in calming delirium. There is great diversity of opinion, however, on this point, some considering it a very valuable remedy in this disease, and others as nearly or quite useless.

Our author considers *belladonna* one of the most powerful sedatives we possess. "It acts by diminishing the sensibility of the nervous system, and hence it is specially indicated in those cases of mania where there are pain and increased sensibility of the brain; and in some of those cases of dementia where there is such extreme irritability, it is likely to prove very serviceable."

It is always best to begin with small doses, and gradually increase them, and in all large doses of narcotics, it is highly important that the patient should be frequently seen and his symptoms carefully observed.

*Hydrocyanic acid* is referred to, but the known bad effects it has produced in insanity, and the very doubtful good ones, should lead to great caution in its use.

A passing notice is given to *colchicum*, *stramonium*, *aconite*, *tobacco*, *hops*, *quinine*, and *arsenic*, but none are highly recommended, and although they may be in rare instances of some use, they are not likely to have a high character among the means for inducing sleep in insanity.

Warm baths are referred to as among our most valuable means, and as fulfilling some of the most important indications in the treatment of insanity. They deserve all that Dr. W. says in their favour, and of all the means we have ever tried, they have most frequently given us satisfaction, in controlling excitement, calming restlessness, and in inducing sleep. Dr. W. thinks 96° Fahr. usually the best temperature, and that they should never exceed 98°. "It is often asked how long should a patient remain in a bath, and how frequently should it be repeated? It may be necessary to order a bath daily, or even twice a day, and the patient may be immersed half an hour, one hour, or even two hours, the time depending on the effect produced." The *semicupium* and *pediluvium* are also noticed as valuable remedies. The *cold bath* and *shower bath* are recommended as occasionally inducing sleep when other remedies have failed, but discrimination is necessary in their use.

Active exercise in the open air, and regular occupation, Dr. W., in common with most practical men, considers one of the very best means for inducing sound and refreshing sleep, and what renders it peculiarly valuable, is its applicability to a very large class of chronic cases, and the facility with which any ill effects arising from its use may be observed.

In the concluding observations, and throughout the essay, the views advanced by our author are generally correct, and many of them highly important. The whole essay is one which cannot fail to be of service to many practitioners who have seen little of insanity, and tending, as it does, to the inculcation of sound principles and judicious practice, it can hardly fail to be regarded with more favour by the profession than many publications of much greater pretensions.

T. S. K.